

# HOAHub Data & AI

## HOAHub Virtual Workshop: How to Analyze HiP-CT Images of Human Organs

### Date and Time

- **Date:** 23rd May 2024
- **Time:** 10:00 AM - 12:30 PM (UTC)
- **Zoom:**  
<https://dtudk.zoom.us/j/63889669536?pwd=Q2dCK2xNT1BoaVdaMzRWK2lwZFYwdz09> (Meeting ID: 638 8966 9536, Passcode: 643514)

### Abstract

Are you interested in accurately analyzing HiP-CT images? Join our virtual workshop where we will have inspirational talks and discussions centered around segmenting and quantifying the first HOAHub data. The collaborative efforts of the HOAHub provide a unique opportunity to advance the analysis pipeline for human organ synchrotron data. Despite the heterogeneity of this large image collection, they share common structural properties. As a result, the need for analysis tools is consistent across datasets. Our key question: How can we collectively devise tools and analysis workflows to simplify structural quantification and accelerate scientific results? During the workshop, you will see examples of the work done so far and engage in discussions about the results obtained and the possibilities we can explore in the future.

### Target Group

The workshop is designed for the **Working Group on Data Infrastructure & AI Segmentation and Quantification** within the HOAHub community but is open to anyone interested.

### Program

- **10:00 AM - 12:30 PM:** Workshop sessions with 15-minute presentations
- **Presenters:**
  - **Anders Bjorholm Dahl**, Professor, DTU (introduction and finishing remarks)
  - **Hugo Witz**, PhD Student, EPFL & University of Copenhagen. "tbc"
  - **Jannis Schaeper**, PhD Student, University of Göttingen. "3D imaging of the human temporal bone by X-ray phase-contrast tomography"
  - **Jakob Reichmann**, PhD Student, University of Göttingen. "*3D multiscale characterization of the human placenta: from whole organ to subcellular resolution by full-field X-ray phase-contrast tomography*".
  - **Yashvardhan Jain**, Research Software Engineer, UCL. "*Hacking the Human Vasculature in 3D – Kaggle challenge*"
  - **Felipe Delestro**, Research Software Developer, DTU. "*Volumetric image analysis in Python with the qim3d*"